

May 16, 2022

Womble Bond Dickinson (US) LLP

1221 Main Street Suite 1600 Columbia, SC 29201

t: 803.454.6504

Belton Zeigler Partner

Direct Dial: 803-454-7720 Direct Fax: 803-381-9120

E-mail: Belton.Zeigler@wbd-us.com

## **VIA Electronic Filing**

The Honorable Jocelyn G. Boyd Chief Clerk/Administrator Public Service Commission of South Carolina 101 Executive Center Drive Suite 100 Columbia, SC 29210

Re: Coal Plant Retirement Study for Dominion Energy South Carolina, Incorporated, Docket No. 2021-192-E

Dear Ms. Boyd:

By Order No. 2022-305, issued in the above-referenced docket, the Public Service Commission of South Carolina (the "Commission") directed Dominion Energy South Carolina, Inc. ("DESC" or "Company") to file a Coal Plants Retirement Study with exhibits and comments by May 16, 2022. In compliance with that directive, DESC files the attached Coal Plants Retirement Study Report (the "Study"). In addition, DESC submits the following comments:

#### Introduction

DESC undertook the Study as an initial step in planning the retirement of its last three coalonly generating units which are located at Wateree Station near Eastover, South Carolina ("Wateree"), and Williams Station which is located near Goose Creek, South Carolina ("Williams," collectively the "Units"). The Study evaluated how DESC can best retire the Units consistent with its commitment to reduce carbon emissions while ensuring that the Company continues to provide safe, reliable and affordable electric service to South Carolina customers. To that end, the Study quantified the costs and carbon impacts of retiring the Units at multiple possible dates. May 16, 2022 Page 2



The Study was managed by Charles River Associates ("CRA") and conducted in regular consultation with stakeholders as to inputs, assumptions, methodology, and schedule. In its 2023 IRP, DESC will present the Commission with one or more preferred retirement and replacement options and will identify the technologies, timetables and locations for replacement capacity at that time.

This letter provides a brief summary of the conclusion of the Study and the retirement and replacement timeline that it contains.

# The Transmission Impact Analysis

DESC performed an initial Transmission Impact Analysis ("TIA") to inform the Study which found that replacing all Units will require significant transmission system upgrades to maintain system reliability, with Williams requiring the most extensive upgrades. Of the five cases studied, the lowest cost option from a transmission standpoint was replacing the Units with a combination of solar capacity, batteries and gas-fired generation at the site of the retired Canadys coal station north of Charleston.

## **Retirement Dates**

Using information from the TIA, DESC assessed the time required for building or procuring the generation and transmission resources needed to support reliable service after Wateree and Williams are retired. This schedule assessment established that the earliest feasible dates for retirement were 2028 for Wateree and 2030 for Williams.

Retiring Wateree in 2028 will require DESC to procure approximately 344 megawatts replacement capacity to maintain system reliability which DESC can do (a) either permanently beginning in 2029 or (b) on an interim basis if permanent capacity to replace Wateree is included in the Williams replacement project. Under either approach, procuring, siting and constructing the required generation or transmission capacity by the end of 2028 is an ambitious goal which is subject to regulatory, procurement and construction risk.

Replacing Williams capacity will be more complex and difficult than for Wateree given the role Williams plays in supporting reliability in the Charleston area and the limited natural gas resources in that area. The Study provides an illustrative planning schedule for a combined Williams and Wateree replacement project at Figure 1, page 7 of the Study. It shows critical paths for IRP review and approval of the retirement plan, Commission proceedings for siting new transmission and generation assets, Federal permitting and siting of natural gas pipeline projects and the design and construction of required projects once approved.

Achieving its goals of retiring Wateree in 2028 and Williams in 2030 will require DESC to complete this complex and interrelated series of planning, regulatory and construction requirements on a compressed timetable. The 2028 and 2030 dates include little if any margin for delay. They assume that the regulatory and legal processes required to authorize, site and procure



or construct the required assets are not unduly delayed. Large parts of this timetable are outside of DESC's direct control.

#### Costs and CO<sub>2</sub> Emissions

The Study then evaluated the costs and CO<sub>2</sub> impacts from retiring the Units (a) as early as possible, (b) as late as possible (*i.e.*, at the end of their useful lives), or (c) at intervening dates shown by resource optimization modeling to result in the lowest costs for customers. This analysis found that retiring the Units at the earliest feasible dates, 2028 and 2030, reduces carbon emissions and environmental risks without unduly impacting rates to customers. Compared with operating Wateree and Williams until the end of their useful lives, retiring them at the earliest feasible dates reduces 2040 CO<sub>2</sub> emissions on average across all market scenarios by 14%. On average retiring each plant early adds a 7% reduction in 2040 carbon emissions compared to 2005 levels. Retiring all Units as early as possible (Wateree in 2028 and Williams in 2030) would only increase costs to customers on an annualized basis by less than one-half of one percent over the 30 year planning period.

### **Conclusion**

The Study includes extensive discussion of its purpose, methodology and conclusions and a more detailed summary of the matters touched on here. The conclusions of the Study are subject to further review and possible modification and will inform future analysis in preparation for the 2023 IRP.

DESC wishes to thank the Commission for the opportunity to provide these comments, and to thank the Stakeholders for their participation and contributions throughout the process.

Respectfully submitted,

Womble Bond Dickinson (US) LLP

Belton T. Zeigler

cc: All parties of record (via electronic filing)